

Trade Wind Series

Vietnam Trip Notes: The Next Global FDI and Supply Chain Hub?¹

November 9, 2023

“A day of traveling brings a basketful of learning.”
~ Vietnamese expression

I. Introduction

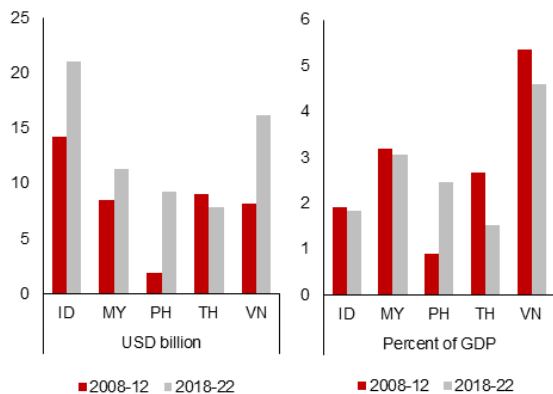
1. **Vietnam is emerging as a key manufacturing hub, having become a leading destination for foreign direct investment (FDI) in ASEAN over the past decade.** Vietnam’s FDI flows have doubled from an annual average of USD 8 billion from 2008–12 to USD 16 billion from 2018–22, surpassing inflows to the larger ASEAN economies of Malaysia, Philippines, and Thailand, and fast approaching those to Indonesia (Figure 1). Relative to economic size, Vietnam is second only to Singapore in the ASEAN region, with annual FDI amounting to an average 4.6 percent of GDP from 2018–22. The country’s manufacturing sector has expanded quite substantially as a result, from 17 percent of GDP in 2010 to 25 percent in 2022 (Figure 2). Vietnam’s growing capacity as a global manufacturing hub has enabled its industries to benefit from China’s declining and emerging sectors ([Zhao and Ho 2023](#)).

2. **Against this backdrop, AMRO staff recently visited Ho Chi Minh City (HCMC) and Hanoi, Vietnam to undertake on-the-ground research into the factors underpinning the country’s ability to attract foreign investors.** Specifically, the purpose of the trip was to: (i) gather information on and insights into supply chain developments and manufacturing reallocations that are taking place in the economy; and (ii) gauge the near-term outlook for FDI in Vietnam. Staff met with foreign investor business groups in the two main cities, an industry association, and researchers on international trade issues. Staff also engaged with two major FDI initiatives in Vietnam—a Belgian industrial zone developer and operator (Deep C) and a Singaporean joint venture on logistics infrastructure (Vietnam SuperPort), both situated in northern Vietnam. This note presents the key takeaways from the various meetings.

¹ Prepared by Diana del Rosario (diana.del-rosario@amro-asia.org) and Hongyan Zhao (zhao.hongyan@amro-asia.org) (both Macro-Financial Research Group); reviewed by Li Lian Ong (Senior Advisor). The authors would like to thank Hoang Nam Nguyen for useful comments. The views expressed in this note are the authors’ and do not necessarily represent those of the AMRO or AMRO management.

Figure 1. Selected ASEAN: FDI, 2008–12 versus 2018–22

(Billions of US dollars; percent of GDP)

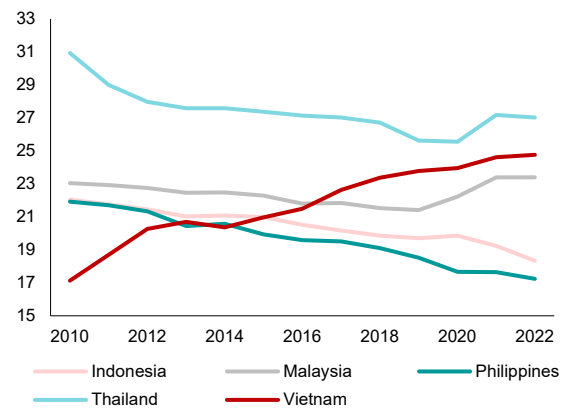


Sources: IMF and national authorities via Haver Analytics; and AMRO staff calculations.

Note: ID = Indonesia; MY = Malaysia; PH = Philippines; TH = Thailand; VN = Vietnam.

Figure 2. Selected ASEAN: Manufacturing Sector

(Percent of GDP)



Sources: National authorities via Haver Analytics; and AMRO staff calculations.

II. Characteristics of Vietnam's FDI

3. FDI flows to Vietnam have been led by China, Japan, Korea, and Singapore.

Korea is Vietnam's biggest investor in terms of cumulative FDI, with the bulk of its greenfield investments taking place in the first-half of the past decade (Figure 3). The wave of Korean FDI was followed by Japan's, which recorded a sharp increase in registered greenfield investment in 2017–18. Although inflows were largely stable previously, FDI from China and Taiwan, Province of China began to pick up in 2018–19. Then, FDI from Singapore became more pronounced from 2020, making the island city-state the second largest investor in terms of cumulative registered FDI since 2013.

4. Manufacturing accounts for the bulk of FDI into Vietnam, followed by real estate and utilities. Manufacturing FDI has accounted for nearly 60 percent of total registered FDI since 2013, while real estate and utilities (electricity, gas, and aircon supply) has made up another 21 percent (Figure 4). Singapore, for example, is strongly present in real estate FDI, largely under joint ventures with local firms such as with the development of the Vietnam-Singapore Industrial Parks (VSIP). There are currently 13 VSIPs to date, with four forthcoming ones and 10 more in the pipeline (Ang 2023). Meanwhile, foreign firms, including Japanese and Korean ones, are capitalizing on Vietnam's push for energy security and green transition with investments in liquefied natural gas (LNG) and renewable energy infrastructure projects (Tsuge and Onishi 2023; Lee 2023). Registered FDI in the consumer-facing sectors, such as wholesale and retail, accommodation and food services, as well as logistics and information technology have also grown in recent years.

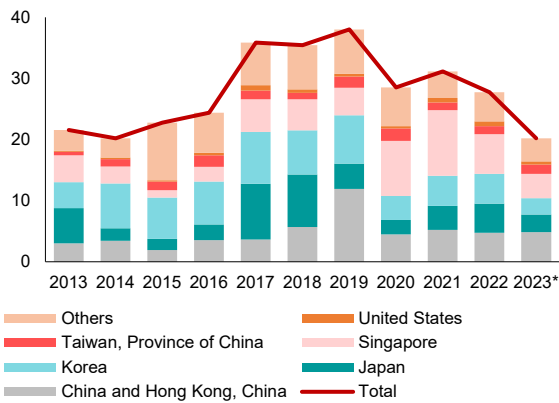
5. Vietnam's northern and southern regions, which attract the bulk of manufacturing FDI, are distinct in their FDI mix:

- Northern Vietnam (Hanoi and nearby provinces) is considered an extended arm of China's manufacturing hub (Figure 5). It hosts several foreign companies—component suppliers and assembly manufacturers—in the electronics, automotive, petrochemicals, and heavy industries. Vietnam's biggest single investor, Samsung Electronics, has 25 of its 28 local suppliers situated in this area (Barnes 2023).

Foreign companies that invest in Northern Vietnam enjoy lower labor costs compared to China but yet maintain close proximity to their own existing operations and suppliers in neighboring China.

- Southern Vietnam (HCMC and nearby provinces) hosts foreign enterprises that are in more traditional industries, such as garments and textile, food processing, and consumer goods, as well as retail and information technology (IT) services. The region also has some presence in electronics and mechanical assembly. American chipmaker Intel Corporation’s largest assembly and test factory in its worldwide manufacturing network is located in HCMC (Nha 2022).
- Central Vietnam attracts a smaller proportion of FDIs engaged in tourism-related services, electronics manufacturing, and agricultural products processing.

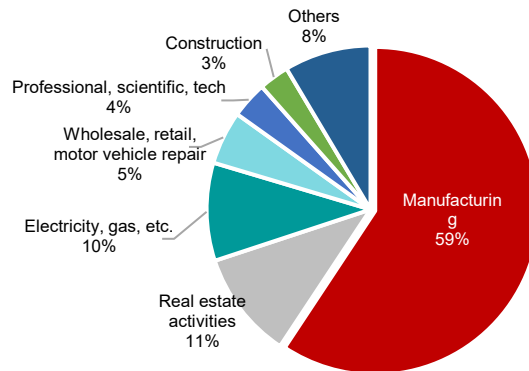
Figure 3. Vietnam: Registered FDI by Source Country
(Billions of US dollars)



Source: Vietnam Ministry of Planning and Investment via Haver Analytics.

Note: *Data until September 2023. Registered (or committed) FDI is presented above in the absence of compositional data for realized FDI. Total consists of greenfield, brownfield, and foreign capital contributions.

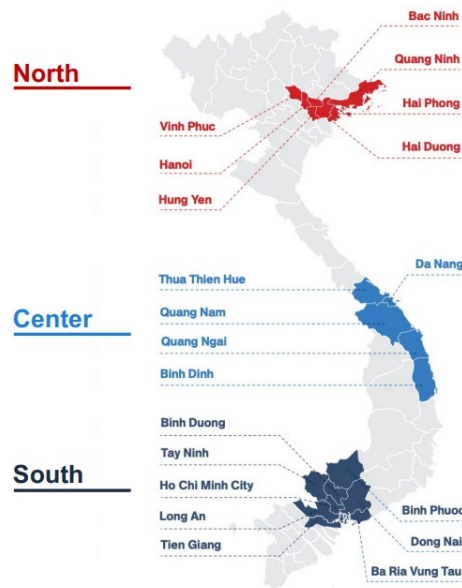
Figure 4. Vietnam: Cumulated Registered FDI by Industry, 2013–September 2023
(Percent)



Source: Vietnam Ministry of Planning and Investment via Haver Analytics.

Note: Prominent components of “Others” include transport and storage; financial, banking, and insurance; and accommodation and food service.

Figure 5. Vietnam: Key Economic Regions

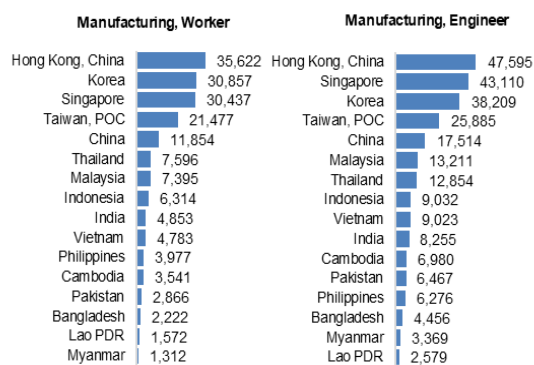


Source: Dezan Shira & Associates.

III. Push and Pull Factors of Vietnam's FDI

6. **Foreign investors have been primarily drawn to Vietnam for its cost-competitiveness and abundant workforce.** The country makes for a compelling ASEAN alternative to China for its significantly lower labor costs. Manufacturing wages in Vietnam are half those of China's and an estimated 30–35 percent lower than in Malaysia and Thailand (Figure 6). At the same time, Vietnam has a relatively abundant and young workforce, backed by its nearly 100 million population with a median age of 32 years (Figure 7). Vietnam ranks third in ASEAN by population size, after Indonesia, and comparable to the Philippines.

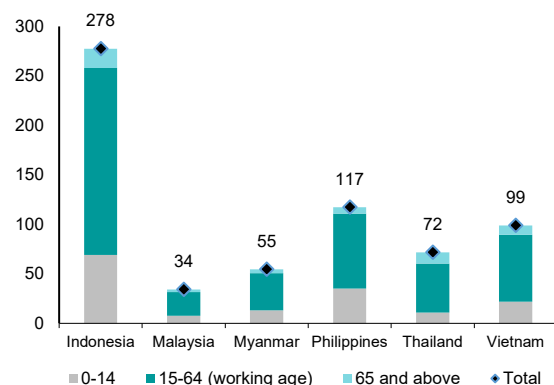
Figure 6. Selected Asia: Manufacturing Sector Annual Wages, 2022
(US dollars)



Source: Japan External Trade Organization (JETRO).

Note: Annual wages refer to the total of annual base salary, benefits, social security, overtime allowances, and bonuses, excluding severance benefits, as of 2022.

Figure 7. Selected ASEAN: Population Profile, 2023 Estimates
(Million persons)



Source: United Nations (UN) World Population Prospects 2022.

Note: The rest of the ASEAN economies with total populations below 20 million have been excluded due to the sharp contrast in scale.

7. **In addition, FDI inflows are spurred by a stable political environment and investment-friendly government policies.** Vietnam, as a one-party state, is one of the more politically stable countries in ASEAN. It has signed 27 free trade agreements (FTAs), including with the European Union and several Asian countries, that allow it to take advantage of favorable tariff rates in international trade (ADB 2023). Moreover, the Vietnamese government offers attractive tax incentives and holidays for large and strategic investments. The standard corporate income tax (CIT) rate is set at 20 percent, but eligible investors can enjoy a CIT rate exemption for the first 4 years and a 10 percent CIT rate in the subsequent nine years (Teo and Tan Tai 2021). Necessary support from the government is likewise available to boost FDI activities. For example, Vietnam grants land use rights, including to foreign investors, which have enabled the development of over 300 industrial parks across the country (Huy 2023; Savills 2023).

8. **The rapid growth in Vietnam's purchasing power, in addition to its large population, has also drawn foreign enterprises to invest in Vietnam in recent years.** The country's consuming class, defined as consumers spending at least USD 11 a day in purchasing power parity terms, expanded from less than 10 percent of the total population in 2000 to 40 percent in 2020, and is projected to reach nearly 75 percent by 2030. Moreover, the higher tiers of the consuming class (who spend USD 30 or more per day) are the fastest growing, outpacing the entry-level consuming class (spending USD 11 to 30 per day) and the below consuming class (spending less than USD 11 per day), and could account for 20 percent of the population by 2030 (Delteil and others 2021). Capitalizing on Vietnam's rising

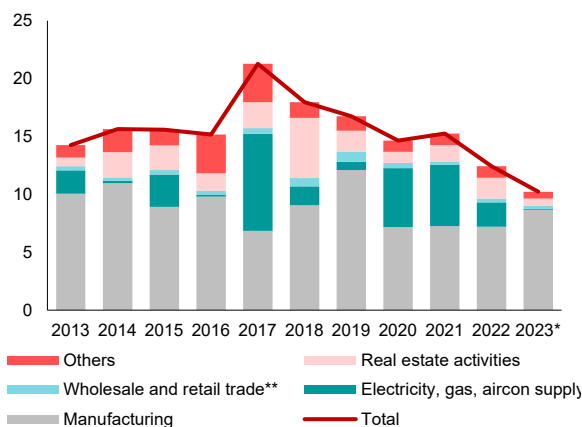
household incomes, more than 57 percent of Japanese investors in Vietnam have expressed their intention to expand their sales functions in the country, according to a JETRO survey (JETRO 2023)—a shift away from their traditional export processing model in Vietnam.

9. **The growing imperative to diversify supply chains has thrust Vietnam into the spotlight as a viable alternative to China within the ASEAN+3 region.** Against the backdrop of the US-China trade tensions and supply chain disruptions during the COVID-19 pandemic, foreign firms are confronted with the need to better manage supply chain risks and are seeking alternative markets and manufacturing sites, in line with the “Plus One” strategy. Vietnam’s direct land and sea access across the border to China helps streamline logistics, bolstering its appeal to investors. Chinese (and Taiwanese), Japanese, and Korean firms have reportedly been diversifying their markets, production bases, and/or procurement sources in Vietnam, while sustaining their exposure to the large domestic market in China and maintaining access to China’s extensive supplier ecosystem. Indeed, Vietnam has become a manufacturing hub for many Korean enterprises, backed by strong bilateral ties between the Korean and Vietnamese governments.

IV. Outlook for Vietnam’s FDI

10. **Vietnam is poised to remain a preferred FDI destination in the foreseeable future, particularly in the context of the growing adoption of the “Plus One” strategy by manufacturers.** Newly registered greenfield FDI projects as of September 2023 have surpassed 2022 levels, and the total gross amount of USD 10 billion is fast approaching the USD 12 billion recorded in 2022 (Figure 8). The manufacturing sector accounts for 85 percent of the total capital investments and has already surpassed 2022 levels, following a significant jump in September on the back of notable increases from China; Hong Kong, China; and Taiwan, Province of China (Figure 9). For example, Deep C, a Belgian developer that runs five industrial zones in Haiphong and Quang Ninh (Northern Vietnam), has noted strong demand for its industrial space this year from China and Taiwan, Province of China as well as Korea (Ryan 2023). Our discussions on the ground reveal that Chinese investors have been snapping up industrial space in a matter of months, in what had previously been a years-long process.

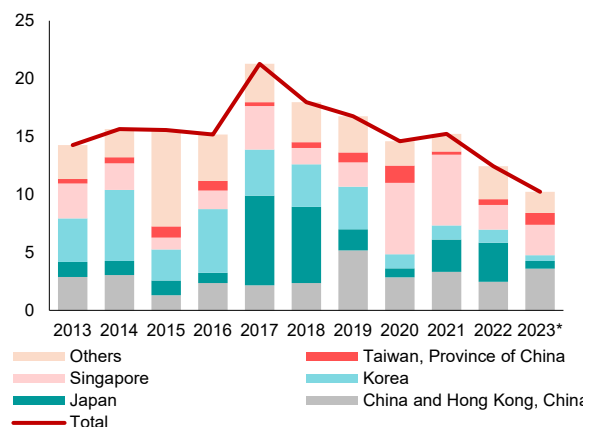
Figure 8. Vietnam: Registered Greenfield FDI by Industry
(Billions of US dollars)



Source: Vietnam Ministry of Planning and Investment via Haver Analytics.

Note: *Data until September 2023. Registered refers to committed or approved FDI.

Figure 9. Vietnam: Registered Greenfield FDI by Source Country
(Billions of US dollars)



Source: Vietnam Ministry of Planning and Investment via Haver Analytics.

Note: *Data until September 2023. Registered refers to committed or approved FDI.

11. **The US has been increasing its investments in Vietnam, particularly in high-tech sectors, although it is not currently a dominant investor there.** According to the Ministry of Planning and Investment, the US has invested approximately USD 11.8 billion across 1,301 projects as of September 2023, making it the 11th largest investor in the country. However, during President Joe Biden's visit to Vietnam in September 2023, both governments outlined plans for enhanced collaboration in critical and emerging technologies, with specific focus on strengthening the semiconductor supply chain. In October, Amkor Technology, a US-based global leader in outsourced semiconductor assembly and testing, inaugurated a USD 1.6 billion semiconductor manufacturing facility in Bac Ninh ([Amkor 2023](#)); the US semiconductor giant, Marvell Technology, is planning to establish a world-class design center in HCMC by the end of 2024 ([Marvell 2023](#)). These investments are poised to elevate Vietnam's standing in the global semiconductor supply chain.

12. **However, the ongoing weakness in external demand and volatility in global financial markets could delay the realization of FDI commitments in the near term.** The Vietnamese economy has faced challenges this year, primarily stemming from a decline in exports due to subdued external demand. Compounding this issue is the fact that the electronics sector, a major driver of the country's exports, is experiencing a downturn in the global market, leading to a more significant drop in exports than initially anticipated. This weak external environment could give pause to investor intentions. The weakness of the JPY and KRW against the USD has also increased procurement costs for Japanese and Korean firms, reportedly causing delays in their business expansion and new investment plans.

V. Challenges and Policy Considerations

13. **Vietnam's FDI boom also comes with its own set of challenges.** While the country boasts numerous advantages that entice foreign investors, as outlined above, they also face certain barriers when contemplating new or additional investments. Inefficient governance, high logistics costs, and a shortage of skilled labor rank among the most critical obstacles.

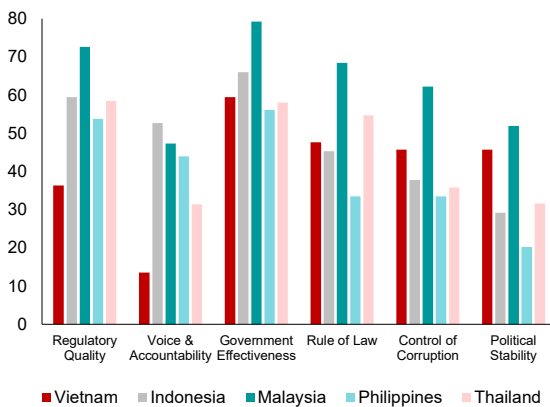
14. **Despite Vietnam's investment-friendly policies, it has ample room to modernize and enhance the efficiency of its governance.** It performs relatively well in four of the six governance dimensions assessed by the World Bank—government effectiveness, rule of law, control of corruption, and political stability. However, it ranks the lowest in regulatory quality, which captures the ability of the government to formulate and implement sound policies and regulations to promote private sector development, among its peer countries in ASEAN, that is, Indonesia, Malaysia, Philippines, and Thailand ([Kaufmann and others 2010](#)) (Figure 10). Specific examples of inefficiencies include:

- Government forms that are in the local language and required to be submitted in hard copy, which forces foreign investors to hire local service providers to process official documents for them;
- Instances when national policies do not align with the implementation of the local government, or where government directives are unclear, leaving business groups to second-guess their interpretation;
- Cautious decision-making processes following the latest anti-corruption drive resulting in severe delays in the approval of large-scale infrastructure projects;

- Very slow issuance of work permits that can take 2.5–4 months, or even longer, even though the local government is efficient in processing investment certificates for foreign enterprises (Thong 2023).

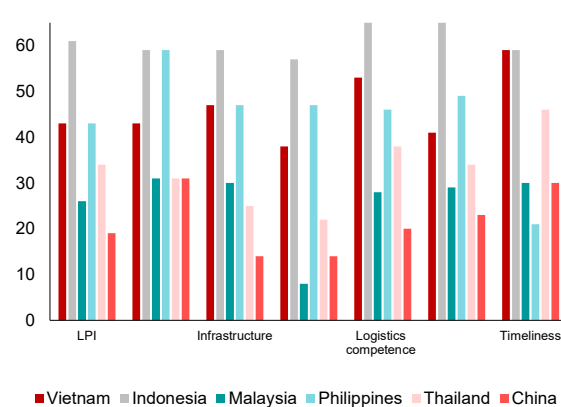
15. **Vietnam’s weak transport infrastructure and high logistics costs have not improved to keep up with growing demand.** Connectivity between seaports, airports, warehouses, and industrial parks is poor. As a result, logistics costs are higher than global standards, estimated to be equivalent to 16.8 percent of GDP (Xinhua 2023). For example, logistics costs make up an estimated 20–25 percent of the price of finished agricultural products. One reason behind this situation is the lack of economies of scale in the logistics industry, with an ecosystem comprising a large number of small or medium-sized providers with limited capital. Among the six key dimensions used by the World Bank to assess a country’s logistics performance, Vietnam ranks ahead of Indonesia only among its fellow ASEAN economies. It shares a similar position with the Philippines but falls considerably behind China (Figure 11).

Figure 10. Selected ASEAN: Worldwide Governance Indicators, 2022
(Percentile rank)



Source: The World Bank.

Figure 11. Selected ASEAN and China: Logistics Performance Index (LPI), 2023
(Rank in 139 countries)



Source: The World Bank.

16. **The Vietnam SuperPort is an FDI initiative that aims to lower logistics costs and improve supply chain connectivity in North Vietnam.** The SuperPort is a smart multimodal logistics project based in Vin Phuc that seeks to ease the already tight capacity at the nearby airport in Hanoi and seaport in Haiphong. It is a joint venture between a Singaporean and a Vietnamese firm, inspired by the success of a visionary supply chain complex in Singapore. The USD 300 million project broke ground in December 2021, and is backed by the International Financial Corporation (IFC 2022). AMRO staff met with representatives of the SuperPort in Hanoi and the Singaporean company at its headquarters in the city-state to learn more about this innovative infrastructure, which represents a component in a broader strategy to enhance the region’s supply chain connectivity and boost trade (del Rosario and others 2023 forthcoming).

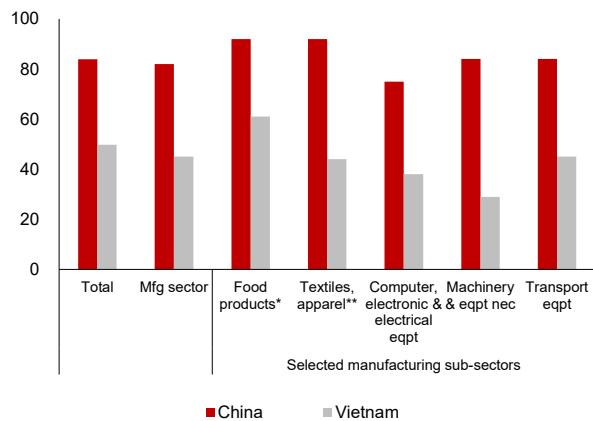
17. **Vietnam needs to increase the cohort of skilled workers to meet evolving industry requirements.** Only about 11 percent of the domestic labor force is highly skilled while 26 percent are trained workers with degrees and certificates. Currently, semiconductor firms in Vietnam are mainly involved in assembly, testing, and packaging (ATP)—the last stage in chipmaking that only accounts for 6–10 percent of a chip’s value (Khan and others 2021; Quy 2023). Intel’s ATP facility in HCMC, which is the company’s biggest worldwide, is

one such example. Vietnam is also beginning to attract high-value semiconductor FDI, such as Samsung Electronics' Research and Development (R&D) Center which opened in Hanoi in December 2022. To meet the growing demand for skilled labor, the government will be investing in training 30,000–50,000 engineers in digital transformation and semiconductor manufacturing (Tuan 2023).

18. Vietnam would have to strengthen the link between FDI and domestic industries to sustain its economic development. A critical issue for the economy is the relative weakness of its domestic sectors when compared to its foreign counterparts, such as China (Figure 12). Despite Vietnam's ability to attract substantial foreign investment, a significant portion of these investors continue to source their supplies from outside the country rather than rely on local firms. Several factors contribute to this phenomenon, including the inadequacy of qualified intermediaries within the country or the preference of some foreign companies to use their own supply chains. Consequently, FDI spillovers from foreign firms to domestic firms' productivity are limited, preventing the country from advancing along the supply chain (Nguyen and others 2020).

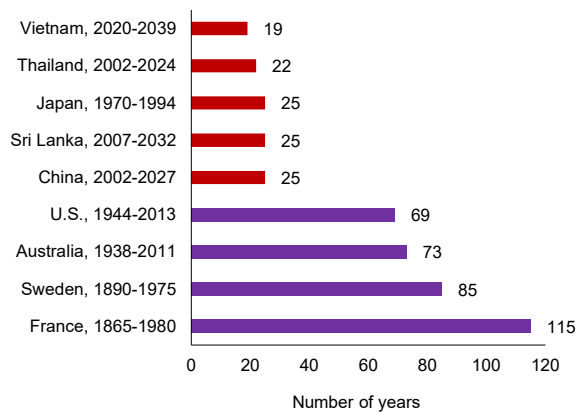
19. Many local businesses tend to remain relatively small in scale and skill. They engage primarily in low-value-added activities such as processing and assembly within the broader supply chain. This limited growth within the domestic sector has not kept pace with the overall economic expansion. It poses a substantial challenge to Vietnam's future economic growth, particularly with rising labor costs and a rapid transition to an aging society, potentially prompting foreign firms to consider relocating elsewhere if not addressed (Figure 13).

Figure 12. China and Vietnam: Domestic Value-added Shares, 2020
(Percent of gross exports)



Source: OECD-WTO Trade in Value Added database.
Note: *Includes beverages and tobacco; **Includes leather and related products; mfg is short for manufacturing, eqpt for equipment, nec for not elsewhere classified.

Figure 13. Selected Economies: Time Taken to Move from Aging to Aged Society
(Years)



Source: UNESCAP (Ageing in Asia and the Pacific: Overview).
Note: Ageing society has a proportion of 7 to less than 14 percent older persons (aged 60 or over) and aged society has 14–21 percent.

20. Vietnam is enforcing the global minimum tax in 2024, but with potential offsetting measures to maintain its FDI competitiveness. The government will be applying the OECD's global minimum (corporate) tax (GMT) of 15 percent in 2024, which means that large businesses enjoying preferential CIT rates below 15 percent would have to top up their tax payments. The GMT applies to businesses with an annual turnover of at least EUR 750 million, which is estimated to affect a total of 122 foreign enterprises operating in the country (VietNamNet 2023). To maintain Vietnam's competitiveness, the

government has indicated that it is considering offering financial support to offset the top-up tax payment. In this regard, there reportedly are discussions for the tax payment offset to be used to incentivize existing firms to devote more resources to workforce training or sustainability initiatives. Some business groups also suggest that the grants from the tax offset can be used to influence new manufacturing FDIs to locate in industrial zones that embrace high environmental standards, to help bring Vietnam toward its net-zero emissions target by 2050.

References

- Amkor. 2023. "Amkor Inaugurates Latest Factory in Vietnam." October 11.
<https://amkor.com/blog/amkor-inaugurates-latest-factory-in-vietnam/>.
- Ang, Prisca. 2023. "Companies Poised to Benefit from 4 New Vietnam-S'pore Industrial Parks, with 10 Others in Pipeline." *The Straits Times*, Singapore, August 29.
<https://www.straitstimes.com/asia/se-asia/companies-poised-to-benefit-from-4-new-vietnam-s-pore-industrial-parks-with-10-others-in-pipeline>.
- Asian Development Bank (ADB). 2023. Free Trade Agreements Database. Asia Regional Integration Center, Manila.
<https://aric.adb.org/database/fta>.
- Barnes, Mark. 2023. "Where are Samsung's Factories in Vietnam?" Vietnam Briefing News, Dezan Shira and Associates, February 8.
<https://www.vietnam-briefing.com/news/where-are-samsungs-factories-in-vietnam.html/>.
- Delteil, Bruce, Matthieu Francois, Duy Mai, and Jeongmin Seong. 2021. "The New Faces of the Vietnamese Consumer." McKinsey & Company, December 7.
<https://www.mckinsey.com/featured-insights/future-of-asia/the-new-faces-of-the-vietnamese-consumer>.
- Huy, Tran Quang. 2023. "Improving Legal Provisions on Rights and Obligations of Foreign-involved Entities Using Land in Vietnam." Vietnam Law & Legal Forum, Hanoi, September 24.
<https://vietnamlawmagazine.vn/improving-legal-provisions-on-rights-and-obligations-of-foreign-involved-entities-using-land-in-vietnam-70574.html>.
- International Financial Corporation (IFC). 2022. "IFC Partners with Singapore's YCH Group and Vietnam's T and T Group to Bolster Logistics in Southeast Asia." World Bank Group, Singapore, February 16.
<https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=26825>.
- Japan External Trade Organization (JETRO). 2023. "2022 Survey on Business Conditions of Japanese Companies Operating Overseas (Asia and Oceania)." February.
<https://www.jetro.go.jp/en/reports/survey/>.

- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2010. "The Worldwide Governance Indicators: Methodology and Analytical Issues." World Bank Policy Research Working Paper No. 5430, Washington, DC, September 24.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1682130.
- Khan, Saif M., Alexander Mann, and Dahlia Peterson. 2021. "The Semiconductor Supply Chain: Assessing National Competitiveness." CSET Issue Brief, Center for Security and Emerging Technology, Washington DC, January.
- Lee, Sul-Gi. 2023. "KOGAS, Vietnamese Firms to Jointly Undertake Major Infra Projects." *The Korea Economic Daily*, Seoul, June 26.
<https://www.kedglobal.com/business-politics/newsView/ked202306260018>.
- Marvell. 2023. "Marvell CEO Matt Murphy Joins President Joseph Biden and US Business Delegation on Trade Meetings with Vietnam." September 11.
<https://www.marvell.com/company/newsroom/marvell-ceo-matt-murphy-president-joseph-biden-us-business-delegation-trade-vietnam.html>.
- Nguyen, Phuong V., Khoa T. Tran, Nga Thuy Thanh Le, and Hoa Doan Xuan Trieu. 2020. "Examining FDI Spillover Effects on Productivity Growth: Firm-Level Evidence from Vietnam." *Journal of Economic Development* 45 (1): 97–121.
<https://jed.cau.ac.kr/archives/45-1.html>.
- Nha, Khuong. 2022. "Vietnam Facility Helps Intel Overcome Semiconductor Shortage." *VnExpress*, Hanoi, May 30.
<https://e.vnexpress.net/news/companies/vietnam-facility-helps-intel-overcome-semiconductor-shortage-4469718.html>.
- Quy, Luu. 2023. "Vietnam's Path to Multibillion-dollar Semiconductor Industry." *VnExpress*, Hanoi, September 17.
<https://e.vnexpress.net/news/business/economy/vietnam-s-path-to-multibillion-dollar-semiconductor-industry-4653653.html>.
- Ryan, Orla. 2023. "Vietnam Becomes Vital Link in Supply Chain as Business Pivots from China." *The Financial Times*, London, July 3.
<https://www.ft.com/content/29070eda-3a0c-4034-827e-0b31a0f3ef11>.
- Savills. 2023. "The Guide to Vietnam Industrial Zone." Savills Vietnam, Hanoi and HCMC, August 20.
<https://industrial.savills.com.vn/2023/08/vietnam-industrial-zone/>.
- Teo, Valerie, and Nguyen Tan Tai. 2021. "Incentives for Foreign Investors in Vietnam." *Bloomberg Tax*, July 30.
<https://news.bloombergtax.com/daily-tax-report-international/incentives-for-foreign-investors-in-vietnam>.
- Thong, Vien. 2023. "European Firms Raise Concerns Related to Getting Work Permits." *VnExpress*, Hanoi, March 7.
<https://e.vnexpress.net/news/economy/european-firms-raise-concerns-related-to-getting-work-permits-4578787.html>.

- Tsuge, Mamoru, and Tomoya Onishi. 2023. "Vietnam Offshore Wind Power Sparks Influx of Foreign Investment." *Nikkei Asia*, Tokyo, January 6.
<https://asia.nikkei.com/Business/Energy/Vietnam-offshore-wind-power-sparks-influx-of-foreign-investment>.
- Tuan, Viet. 2023. "Vietnam to Train Up to 50,000 Semiconductor Engineers." *VnExpress*, Hanoi, August 5.
<https://e.vnexpress.net/news/business/economy/vietnam-to-train-up-to-50-000-semiconductor-engineers-4638352.html#:~:text=Prime%20Minister%20Pham%20Minh%20Chinh,digital%20transformation%20and%20manufacturing%20semiconductors>.
- VietNamNet. 2023. "Vietnam to Internalize Global Minimum Tax Rules for Implementation in 2024." VietNamNet Global, Hanoi, September 29.
<https://vietnamnet.vn/en/vietnam-to-internalize-global-minimum-tax-rules-for-implementation-in-2024-2195642.html>.
- Xinhua. 2023. "Vietnam's Exports Pinched by High Logistics Cost." June 14.
<https://english.news.cn/20230614/c9b15b6c41534aae8999c8536b4e7793/c.html>.
- Zhao, Hongyan, and Yin Fai Ho. 2023. "Has the Shifting Trade Landscape Changed the China–ASEAN Nexus?" AMRO Analytical Note, ASEAN+3 Macroeconomic Research Office, Singapore, September 11.
<https://amro-asia.org/has-the-shifting-trade-landscape-changed-the-china-asean-nexus/>.